

ABSTRACT

A method is described for determining the sequence of nucleic acids. The method employs small solid phase particles 5 having transponders, with a primary layer of an oligonucleotide of known sequence attached to the outer surface of the particle. A read/write scanner device is used to encode and decode data on the transponder. The stored data includes the sequence of the oligonucleotide immobilized on 10 the transponder. The sequence of sample nucleic acids is determined by detecting annealing to an oligonucleotide bound to a particle, followed by decoding the transponder to determine the sequence of the oligonucleotide.